

June 13, 2010

ONBOARD AIR MONITORING FOR  
VOLATILE ORGANIC COMPOUNDS  
REGION 6

- Monitoring data collected for health and safety of workers on the BP ships.
- Monitors are collecting data for total Volatile Organic Compounds.
- Benzene is being used as a surrogate compound for VOC comparisons. This is based on an acute exposure of 1-14 days as defined by ATSDR's Minimal Risk Level (MRL) for hazardous substances.
- BP Air Monitoring Plan (May 2010): Actions based on VOC and benzene levels measured on decks and in living areas onboard the ships.
- From the BP Action Plan:

Chemical	Action Level	Monitoring	Actions
VOC	50 ppm	Continuous > 15 minutes	At Captain's discretion, apply dispersant or use water cannons to break up sheen
VOC	100 ppm	Continuous > 15 minutes	<p>Increase air flow with portable fans.</p> <p>Half-face, OV respirators to continue working.</p> <p>Relocate non-essential personnel to a different area of the ship.</p> <p>Head vessel into the wind.</p> <p>At Captain's discretion, apply dispersant or use water cannons to break up sheen.</p>
VOC	300 ppm	Continuous > 15 minutes	Full-face, OV respirators to continue working.
VOC	1000 ppm	Continuous > 15	Move vessel off

		minutes	location
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Chemical	Action Level	Monitoring	Actions
Benzene	0.5 ppm (On deck or in living quarters)	At least 3 samples over 15 minutes	<p>Increase air flow with portable fans.</p> <p>Half-face, OV respirators to continue working.</p> <p>Relocate non-essential personnel to a different area of the ship.</p> <p>Head vessel into the wind.</p> <p>At Captain's discretion, apply dispersant or use water cannons to break up sheen.</p>
Benzene	10 ppm (On deck)	At least 3 samples over 15 minutes	<p>Relocate personnel to a different area of the ship.</p> <p>Full-face, OV respirators to continue working.</p>
Benzene	10 ppm (In living quarters)	Sustained for 15 minutes confirmed by two instruments	Move vessel off location.
Carbon Monoxide	25 ppm	Continuous for > 15 minutes	Evacuate immediate work area to area of lower concentration.
Hydrogen Sulfide	5 ppm	Continuous for > 15 minutes	Evacuate immediate work area to area of lower concentration.